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Miguel Sarabia Trilla

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EXAMINER

NGUYEN, HUNG D

ART UNIT

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3742

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,307	Applicant(s) SARABIA TRILLA, MIGUEL	
	Examiner HUNG NGUYEN	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13, 15-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13, 15-17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/21/2010 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by McPherson (US Pat. 4,793,602) (newly cited).**

4. Regarding claim 19, McPherson discloses a locking power clamp comprising a body (at 11) and at least two arms (12) adapted to be used to hold two or more sheets (workpiece) to be handled during welding, at least one of said arms (12) being mobile and mounted (by coupling 13) for pivotal movement, and a pneumatic cylinder (11) for activating said at least one mobile arm (12), wherein said body has a central tubular element (body for cylinder 11) with two opposing lateral plates (17) at the lower part

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thereof (Fig. 1 and Fig. 2 shown two lateral plate 17 fixed to the body 11), and a fixed pivot shaft (13) supported by said plates to support said at least one mobile arm (12a) for said pivotal movement, said mobile arm (12) being disposed at the center of the clamp between the lateral plates (17), said central tubular element housing (body for cylinder 11) said pneumatic cylinder (11) having a piston, a piston rod (14), and an extension (13) at its free end with an activation roller (21 and 27) engaging a said mobile arm (12) and operable to effect pivotal movement of said mobile arm on said fixed pivot shaft (18).

5. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Kita (US Pat. 6,364,300) (newly cited).

6. Regarding claim 19, Kita discloses a clamp apparatus comprising a body (24) and at least two arms (18a/18b) adapted to be used to hold two or more sheets (workpiece 12) to be handled during welding, at least one of said arms (18a/18b) being mobile and mounted (by movable pin 74a/74b) for pivotal movement, and a pneumatic cylinder (28) for activating said at least one mobile arm (18/a/18b), wherein said body has a central tubular element (24) with two opposing lateral plates (68a/68b) at the lower part thereof (Fig. 3 and Fig. 4 shown two lateral plate 168a/68b fixed to the body), and a fixed pivot shaft (70) supported by said plates to support said at least one mobile arm (18a/18b) for said pivotal movement, said mobile arm (18a/18b) being disposed at the center of the clamp(10) between the lateral plates (68a/68b), said central tubular element housing (24) said pneumatic cylinder (28) having a piston, a piston rod (32), and an extension at its free end with an activation roller (74a/74b) engaging a said

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mobile arm (18a/18b) and operable to effect pivotal movement of said mobile arm on said fixed pivot shaft (70).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Pat. 5,704,600) in view of Takahashi et al. (US Pub. 2001/0003388) (both newly cited) or Tunkers (DE 29713944) (cited by applicant).**

9. Regarding claim 1, Robinson discloses a power operated clamp assembly comprising: a body (14), a mobile arm (22) adapted to hold said two or more sheets, a pneumatic cylinder (14) for activated said mobile arm (22) of the clamp, said body (housing at 14) being in the form of a central tubular element enclosing said pneumatic cylinder (14), said body (14) having two opposing lateral plates (26 and 28) welded (or fixed) to one end thereof, said mobile arm (22) being mounted for pivotal movement by said plates (26 and 28) at the center of the clamp between said lateral plates (26 and 28). Robinson does not disclose the fixed arm. Takahashi discloses a fixed arm (120). Tunkers also discloses a fixed arm (Fig. 2). It would have been obvious to one ordinary skill in the art at the time of the invention was made to utilize in Robinson, a fixed arm,

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as taught by Takahashi et al, or Tunkers, in order to regulating the rotation of the mobile arm.

10. Regarding claim 2, Robinson discloses the central tubular element (at 14) is constituted from a tube with lateral millings at said one end so as to support said opposing lateral plates (26 and 28), said plates (26 and 28) being joined to the tubular element (14) by welding (or fixed by cylinder tie rod 32). The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the term “said central tubular element is constituted from a with lateral millings at said one end” is considered as product -by-process claim; therefore, no patentable weight is given to the term, and the patentable weight is only given to "said central tubular element so as to support said opposing lateral plates, said plates being joined to the tubular element".

11. Regarding claim 3, Robinson discloses the opposing lateral plates (26 and 28) of the body of the clamp being constituted by steel (Col. 4, Line 57).

12. Regarding claim 4, Robinson discloses said opposing lateral plates (26 and 28) of the body of the clamp have openings (100, 104, 108 and 110) within their perimeters, said perimeters and openings being defined by laser-beam machining. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different

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process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the term “said opposing lateral plates of the body of the clamp have openings within their perimeters, said perimeters and openings being defined by laser-beam machining” ” is considered a product-by-process claim; therefore, no patentable weight is given to the term, and the patentable weight is only given to “said opposing lateral plates of the body of the clamp have openings within their perimeters”.

13. Regarding claim 5, Robinson discloses a fixed transverse pivot shaft (36) mounted between said opposing lateral plates (26 and 28), and an activation roller (37) operable to be displaced by said mobile arm (22) of the clamp on said shaft (36), wherein said opposing lateral plates (26 and 28) of the body of the clamp have lightening openings, orifices (for bolt 37) for mounting the ends of the pivot shaft (36) of the mobile arm (22) of the clamp and elongated holes for guiding said activation roller (37) for displacing the mobile arm (22) of the clamp.

14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Pat. 5,704,600) in view of Takahashi et al. (US Pub. 2001/0003388) and further view of Sawada et al. (US Pub. 2001/0042951) (previously cited).

15. Regarding claim 6, Robinson/Takahashi disclose substantially all features of the claimed invention as set forth above including from Robinson, a mobile arm (40) being disposed between said opposing lateral plates (26 and 28); and from Takahashi, a body (at 14) has a piston rod (32) with a drive rod at its free end and an activation roller (78) on said drive rod for pivoting said mobile arm (20), and wherein said mobile arm (20) of the clamp is mounted for pivoting on a fixed pivot shaft (82) between said plates, and

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takes an L-shaped position and presents on its internal end an elongated hole that causes the arm (20) to pivot on said pivot shaft (82) **except** the mobile arm presents on its internal end an elongated hole that causes the arm to pivot on said pivot shaft, said elongated hole adapted to receive said activation roller, said elongated hole of the arm having a straight inferior area and a gently curved upper area to cause the progressive variation of the angle of incidence between the transverse shaft pivoting the mobile arm and the elongated hole of said mobile arm, and whereby the straight area provides an irreversibility area on triggering. Sawada et al. discloses the mobile arm (23) presents on its internal end an elongated hole (25) that causes the arm to pivot on said pivot shaft (28), said elongated hole (25) adapted to receive said activation roller (24), said elongated hole of the arm having a straight inferior area (25a) and a gently curved upper area (25b) to cause the progressive variation of the angle of incidence between the transverse shaft (28) pivoting the mobile arm and the elongated hole (25) of said mobile arm, and whereby the straight area provides an irreversibility area on triggering. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Robinson/Takahashi, the mobile arm presents on its internal end an elongated hole that causes the arm to pivot on said pivot shaft, said elongated hole adapted to receive said activation roller, said elongated hole of the arm having a straight inferior area and a gently curved upper area to cause the progressive variation of the angle of incidence between the transverse shaft pivoting the mobile arm and the elongated hole of said mobile arm, and whereby the straight area provides an

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irreversibility area on triggering, as taught by Sawada et al., for the purpose of guiding the mobile arm by the elongate hole/opening.

16. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Pat. 5,704,600) in view of Takahashi et al. (US Pub. 2001/0003388) and further view of Dellach (US Pat. 6,079,896) (previously cited).

17. Regarding claim 7, Robinson/Takahashi disclose substantially all features of the claimed invention as set forth above **except** a fitted metal band covering the gap between said two lateral plates on its free lower and rear part, said metal band being provided with a longitudinal opening in which the mobile arm of the clamp passes, said mobile arm including a second metal band, shorter than said fitted metal band confronting the internal side of said fitted metal band adapted to at least partially close said longitudinal opening during pivotal movement of the mobile arm. Dellach discloses a fitted band (74) covering the gap between said two lateral plates (72) on its lower and rear part, said metal band being provided with longitudinal opening (See Fig. 3) in which the mobile arm of the clamp passes. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Robinson/Takahashi, a fitted metal band covering the gap between said two lateral plates on its free lower and rear part, said metal band being provided with a longitudinal opening in which the mobile arm of the clamp passes, said mobile arm including a second metal band, shorter than said fitted metal band confronting the internal side of said fitted metal band adapted to at least partially close said longitudinal opening during pivotal movement of the mobile

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arm, as taught by Dellach, for the purpose of protecting the clamp from foreign material may entering the clamp head.

18. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Pat. 5,704,600) in view of Takahashi et al. (US Pub. 2001/0003388) and further view of Carson (US Pat. 2,264,508) (newly cited).

19. Regarding claim 8, Robinson/Takahashi disclose substantially all features of the claimed invention as set forth above including from Takahashi, a pneumatic cylinder (28) has upper (25) and lower (24) fixed cover, a cylinder casing (26) joined to these upper and lower covers to seal the cylinder, said pneumatic cylinder having a piston (30) and a piston rod (32) having an extension (62) for activating said mobile arm (20) **except** a casing being slightly spaced from the internal side of said tubular element to provide a spacing providing a passage for air connecting the upper with the lower part of the cylinder. Carson discloses a casing (32) being slightly spaced from the internal side of said tubular element (at 22) to provide a spacing (44) providing a passage for air connecting the upper with the lower part of the cylinder. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Robinson/Takahashi, a casing being slightly spaced from the internal side of said tubular element to provide a spacing providing a passage for air connecting the upper with the lower part of the cylinder, for the purpose of having the passage for the relief pressure.

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20. Regarding claim 11, Carson discloses an orifice (58) in said upper cover admitting air into said spacing (44) between the cylinder casing (32) and the tubular element of the body (at 22).

21. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Pat. 5,704,600) in view of Takahashi et al. (US Pub. 2001/0003388), Carson (US Pat. 2,264,508) and further view of Tunkers (DE 10136057) (hereinafter Tunkers'6057) (previously newly cited).

22. Regarding claim 9, Robinson/Takahashi/Carson disclose substantially all features of the claimed invention as set forth above **except** a bolt with a top head extending above said piston, said upper cover of the pneumatic cylinder having a central receptacle adapted to receive said top head of the bolt in the upper limit position of the piston. Tunkers'6057 discloses a bolt (19) with a top head extending above said piston (9), said upper cover (Fig. 14) of the pneumatic cylinder (6) having a central receptacle (15) adapted to receive said top head of the bolt (19) in the upper limit position of the piston. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Robinson/Takahashi/Carson disclose, a bolt with a top head extending above said piston, said upper cover of the pneumatic cylinder having a central receptacle adapted to receive said top head of the bolt in the upper limit position of the piston, as taught by Tunkers'6057, for the purpose of adjusting the angle of the angle of the clamping arm.

23. Regarding claim 10, Tunkers'6057 discloses the receptacle has an air outlet (8) with restrict and adjustable flow to provide a pneumatic shock absorber effect.

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24. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Pat. 5,704,600) in view of Takahashi et al. (US Pub. 2001/0003388) and further view of Kipping et al. (US Pat. 6,525,294) (previously cited).

25. Regarding claim 15, Robinson/Takahashi disclose substantially all features of the claimed invention as set forth above **except** a bracket at the end of the body opposite to said one end, said bracket adapted to fasten the clamp to a grip or a welding tool including a cut-out on the bracket having a shoulder adapted to fit with a corner at the top edge of the tubular body of the clamp. Kipping et al. discloses a bracket (3) at the end of the body opposite to said one end, said bracket adapted to fasten the clamp to a welding tool (10) including a cut-out on the bracket having a shoulder adapted to fit with a corner at the top edge of the tubular body of the clamp. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Robinson/Takahashi, a bracket at the end of the body opposite to said one end, said bracket adapted to fasten the clamp to a grip or a welding tool including a cut-out on the bracket having a shoulder adapted to fit with a corner at the top edge of the tubular body of the clamp, as taught by Kipping et al., for the purpose of having a device for clamping and welding sheets of metal.

26. Claims 13 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Pat. 5,704,600) in view of Takahashi et al. (US Pub. 2001/0003388) and further view of Takahashi (US Pat. 5,996,984) (previously cited) or Fukui (US Pub. 2004/0041324) (newly cited).

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27. Regarding claim 16, Robinson/Takahashi disclose substantially all features of the claimed invention as set forth above including from Robinson, lateral plates (26 and 28) have openings **except** the covers for said openings, said covers being coextensive with the external sides of said plates. Takahashi '984 discloses the covers (16a and 16b) for said openings (12a and 12b), said covers being coextensive with the external sides of said plates (14). Fukui also discloses the covers (88a and 88b) for said openings (16a and 16b), said covers being coextensive with the external sides of said plates (26 and 28). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Robinson/Takahashi, the covers for said openings, said covers being coextensive with the external sides of said plates, as taught by Takahashi '984 or Fukui, for the purpose of protecting the clamp from dirt/dust or contamination may enter to the body.

28. Regarding claim 17, Robinson discloses a mounting unit (10) for setting-up of said tubular body (at 14) at the lower part of said body, and, at the upper part of said body (at 14), said lateral plates (26 and 18) having openings (100, 104, 108, 110) and defining a wide transverse recess open at the top in order to mount said mobile arm (22), said lateral plates (26 and 28) having orifice for fastening screws (37, 106). Fukui discloses cover element (200) closing the upper part of the clamp (10) itself in order to prevent welding splashes and other scraps from going in.

29. Regarding claim 13, Robinson/Takahashi disclose substantially all features of the claimed invention as set forth above except a sensor housing that detects the angular pivotal position of the mobile arm, and means mounting said housing on the rear side of

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the clamp. Fukui discloses a sensor housing (110) that detects the angular pivotal position of the mobile arm (20), and means mounting (112) said housing on the rear side of the clamp (12) (Fig. 8; Par. 56). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Robinson/Takahashi, a sensor housing that detects the angular pivotal position of the mobile arm, and means mounting said housing on the rear side of the clamp, as taught by Fukui, for the purpose of detecting the position of the piston rod which control the mobile arm.

30. Applicant's arguments with respect to claims 1-11, 13, 15-17 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG NGUYEN whose telephone number is (571)270-7828. The examiner can normally be reached on Monday-Friday, 9M-6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG NGUYEN/
Examiner, Art Unit 3742
12/22/2010

/Quang T Van/
Primary Examiner, Art Unit 3742